# CAG Meeting

April 17, 2019



## Air Monitoring Plan for Area 2 Objectives

- Ensure fugitive emissions from ISTT operations do not produce unacceptable risk at exclusion zone, site perimeter and off-site locations
- Establish Project Action Levels (PALs)
- Ensure worker protection through appropriate protective equipment and engineering controls
- Evaluate air quality prior to work beginning
- Evaluate real-time concentrations
- Verify that emissions remain under control during operations
- Evaluate monitoring data to identify if enhancements to monitoring program is needed

### Air Monitoring During Drilling/Operations

- Area 2 air monitoring program similar to Area 1
- Occupational Air Monitoring
  - Health and safety of the workers
- Ambient Air Monitoring
  - Seven perimeter air monitoring locations
- Wellfield perimeter air monitoring
  - Daily evaluations



#### Air Monitoring Program

- Occupational Air Monitoring
  - Personnel air monitoring during drilling
    - Monitoring equipment on person (badges) to determine appropriate PPE
    - 5 days
    - Level B (supplied air during drilling)
  - exclusion zone air monitoring during drilling
    - Upwind and downwind locations for DBCP
    - No DBCP detected at Area 1, or to-date at Area 2
    - Real-time monitoring using PIDs 4 times per day minimum



#### Air Monitoring Program

- Ambient Air Monitoring
  - Seven air monitoring stations
  - Project Action Levels
    - 24 hours per day, 7 days per week calculated
    - Acetone, Benzene, Bromobenzene, carbon tetrachloride, chloroform, DBCP, 1,2 –
       Dichlorethane, methylene chloride and trichloroethylene
  - During drilling, two weeks then if no issues, two days per week for rest of drilling
  - During heating operations, daily for one week at onset of operations and if no issues, twice per week until 100 C, then daily for one week and if no issues, twice per week for balance of operations.



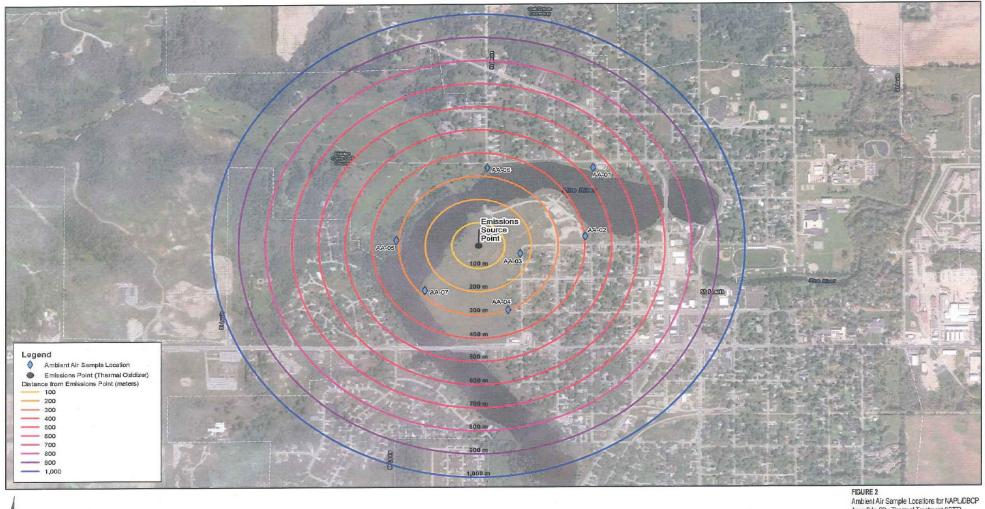


FIGURE 2
Ambient Air Sample Locations for NAPLIDBCP
Area 2 In Situ Thermal Treatment (ISTT)
Velsicof Chemical Corporation Superfund Site
St. Louis, Michigan

Meters

Decument Path: \U00a78000clsdelles/gis\_charc2/ENB0/02\_ProjEEPAWebioLSupertundSteVReports\0019\Misc\019\018cdMaps\00000clsdelles/giprofC\_Ambient Air Sample Locations for NAPL\_DBCP Area 2.mmd User Name: mpetersh Date: 3/18/2019 Time: 12.91:12 PW

#### Air Monitoring Program

Wellfield and Treatment System Perimeter Monitoring

• Minimum of 4 daily measurements at eight locations surrounding wellfield and 4 locations surrounding treatment system using

photoionization detector (PID)





#### Air Monitoring Plan

- Waiting to receive air discharge requirements from MDEQ
  - Expect similar requirements as Area 1
- Planning first responders meeting
- Malfunction Abatement Plan same as Area 1
- Revised Health and Safety Plan for 2019